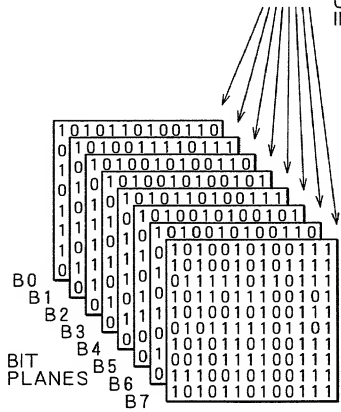


FIG. 1



ORIGINAL IMAGE



RECOGNIZED IMAGE



VIEWER



FIG. 2

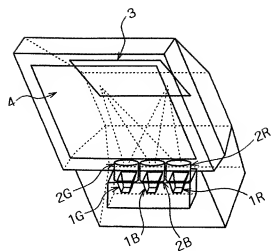


FIG. 3

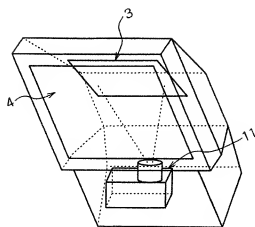


FIG. 4

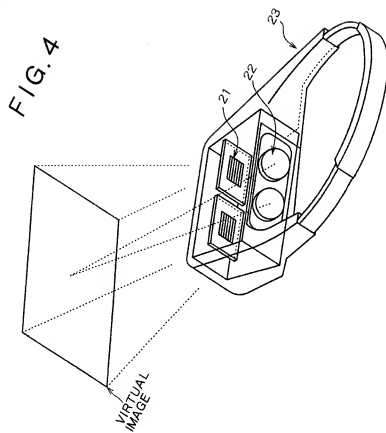


FIG. 5

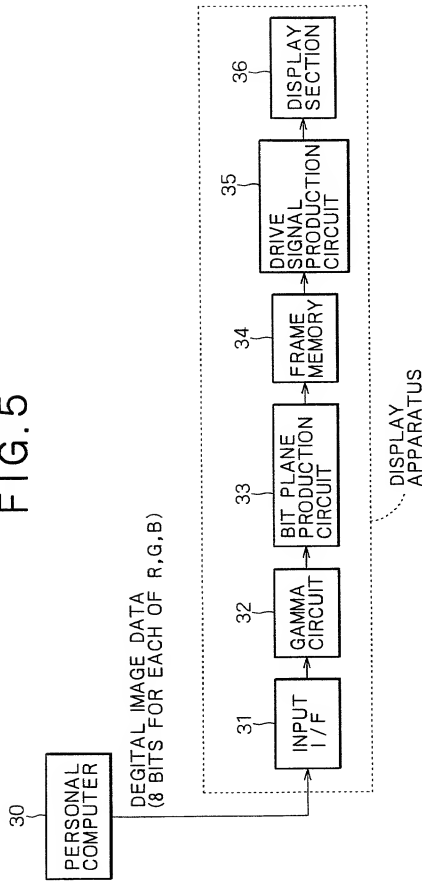


FIG. 6

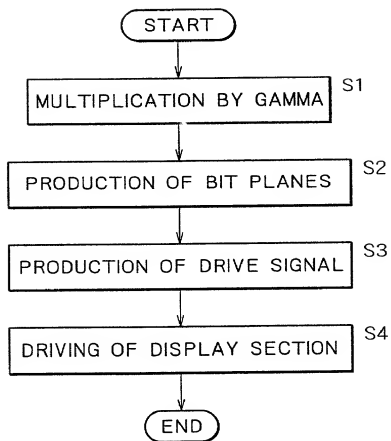


FIG. 7A

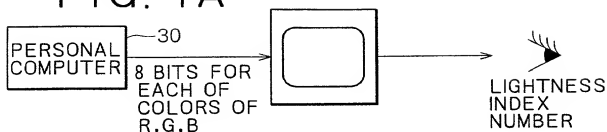


FIG. 7B



FIG. 7C

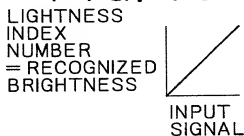


FIG. 7D

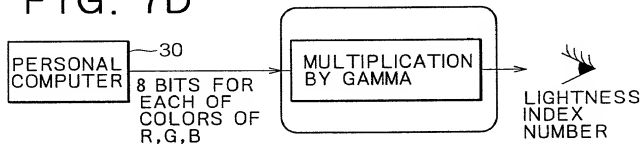


FIG. 7F

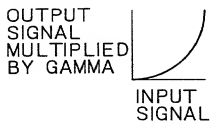


FIG. 7E

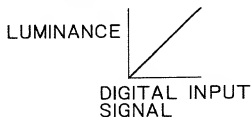


FIG. 7G



FIG. 7H

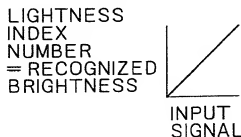


FIG. 8A

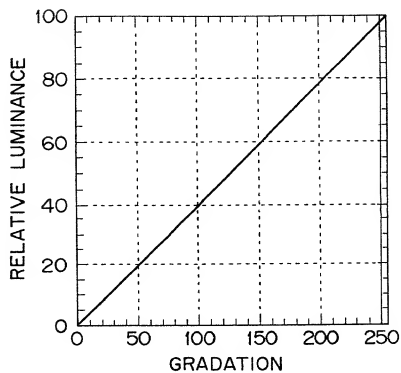


FIG. 8B

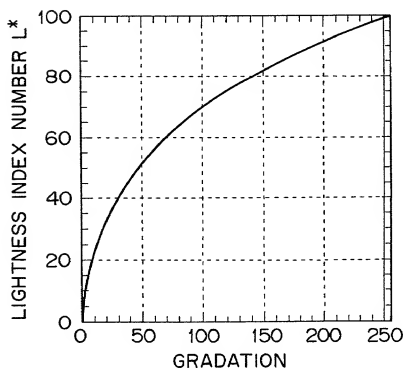


FIG. 9A

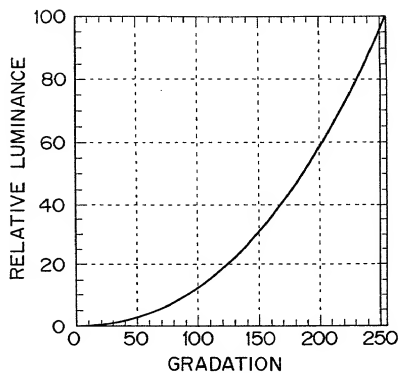


FIG. 9B

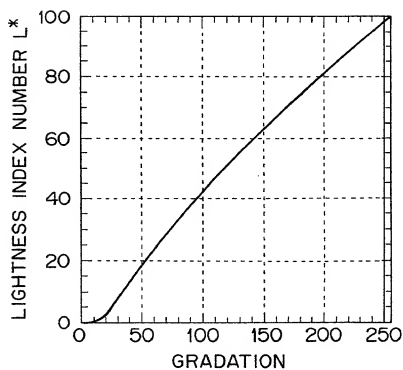


FIG. 10A

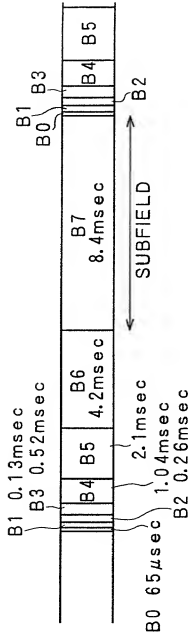


FIG. 10B



LUMINANCE OF LIGHT SOURCE



FIG. 10C

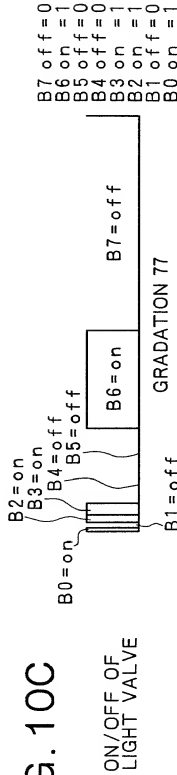


FIG. 11A

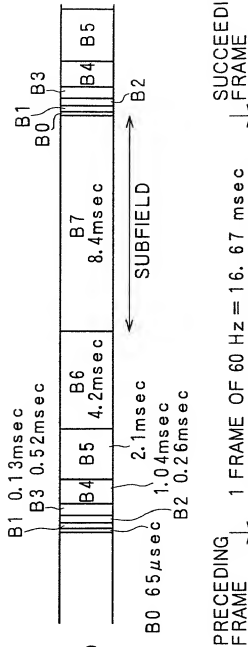


FIG. 11B

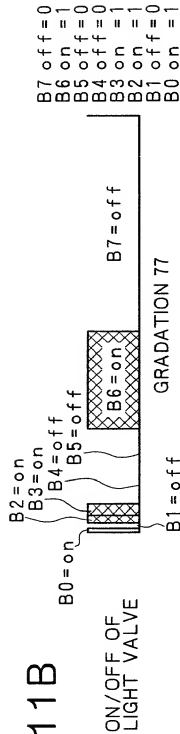


FIG. 12A

LUMINANCE OF
LIGHT SOURCE

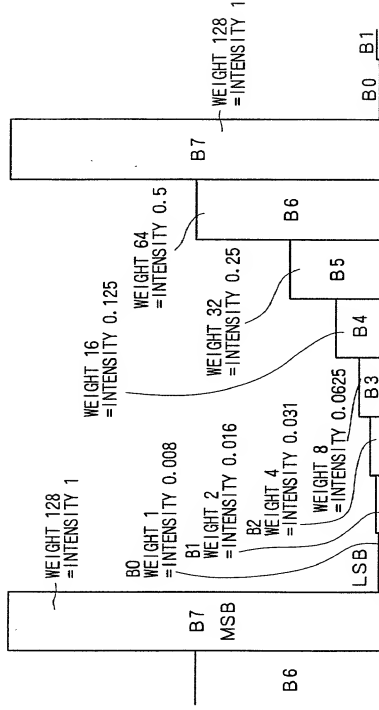


FIG. 12B

ON/OFF OF LIGHT
SOURCE/LIGHT VALVE

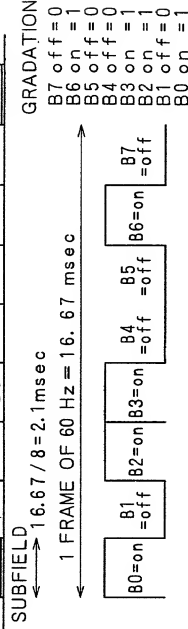


FIG. 13A

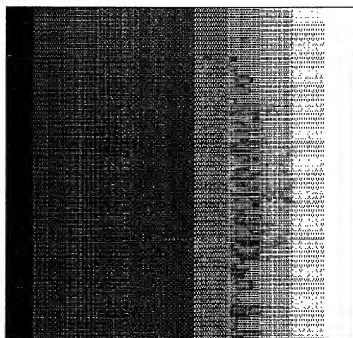


FIG. 13B

ENLARGED



FIG. 14A



GRADATION 0

GRADATION 255

256 GRADATIONS \times 2 PIXELS/
GRADATION = 512 PIXELS

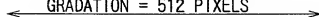
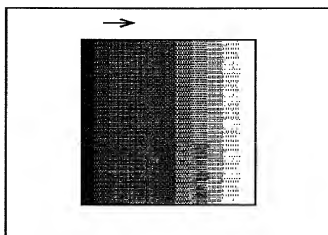


FIG. 14B

10 PIXELS/FRAME = 600 PIXELS/
1 SECOND
WHEN 1 FRAME = 60 Hz



- 640/480 DISPLAY HORIZONTALLY 640 PIXELS \rightarrow 1.1 SECONDS
- 800/600 DISPLAY HORIZONTALLY 800 PIXELS \rightarrow 1.3 SECONDS
- 1024/768 DISPLAY HORIZONTALLY 1024 PIXELS \rightarrow 1.7 SECONDS
- 1280/1024 DISPLAY HORIZONTALLY 1280 PIXELS \rightarrow 2.1 SECONDS
- 1600/1200 DISPLAY HORIZONTALLY 1600 PIXELS \rightarrow 2.6 SECONDS

FIG. 15

(A) (B) (C) (D)

8-BIT LINEAR	$\tau 2.2$	8-BIT INTEGER								
			B0	B1	B2	B3	B4	B5	B6	B7
0	0.0	0	0	0	0	0	0	0	0	0
1	0.0	0	0	0	0	0	0	0	0	0
2	0.0	0	0	0	0	0	0	0	0	0
3	0.0	0	0	0	0	0	0	0	0	0
4	0.0	0	0	0	0	0	0	0	0	0
5	0.0	0	0	0	0	0	0	0	0	0
6	0.1	0	0	0	0	0	0	0	0	0
7	0.1	0	0	0	0	0	0	0	0	0
8	0.1	0	0	0	0	0	0	0	0	0
9	0.2	0	0	0	0	0	0	0	0	0
10	0.2	0	0	0	0	0	0	0	0	0
11	0.3	0	0	0	0	0	0	0	0	0
12	0.3	0	0	0	0	0	0	0	0	0
13	0.4	0	0	0	0	0	0	0	0	0
14	0.4	0	0	0	0	0	0	0	0	0
15	0.5	1	1	0	0	0	0	0	0	0
16	0.6	1	1	0	0	0	0	0	0	0
17	0.7	1	1	0	0	0	0	0	0	0
18	0.7	1	1	0	0	0	0	0	0	0
19	0.8	1	1	0	0	0	0	0	0	0
20	0.9	1	1	0	0	0	0	0	0	0
21	1.0	1	1	0	0	0	0	0	0	0
22	1.2	1	1	0	0	0	0	0	0	0
23	1.3	1	1	0	0	0	0	0	0	0
24	1.4	1	1	0	0	0	0	0	0	0
25	1.5	2	0	1	0	0	0	0	0	0
26	1.7	2	0	1	0	0	0	0	0	0
27	1.8	2	0	1	0	0	0	0	0	0
28	2.0	2	0	1	0	0	0	0	0	0
29	2.1	2	0	1	0	0	0	0	0	0
30	2.3	2	0	1	0	0	0	0	0	0

(OMITTED)

241	225.2	225	1	0	0	0	0	1	1	1
242	227.3	227	1	1	0	0	0	1	1	1
243	229.3	229	1	0	1	0	0	1	1	1
244	231.4	231	1	1	1	0	0	1	1	1
245	233.5	234	0	1	0	1	0	1	1	1
246	235.6	236	0	0	1	1	0	1	1	1
247	237.7	238	0	1	1	1	0	1	1	1
248	239.9	240	0	0	0	0	1	1	1	1
249	242.0	242	0	1	0	0	1	1	1	1
250	244.1	244	0	0	1	0	1	1	1	1
251	246.3	246	0	1	1	0	1	1	1	1
252	248.4	248	0	0	0	1	1	1	1	1
253	250.6	251	1	1	0	1	1	1	1	1
254	252.8	253	1	0	1	1	1	1	1	1
255	255.0	255	1	1	1	1	1	1	1	1

FIG. 16A

SUBFIELD

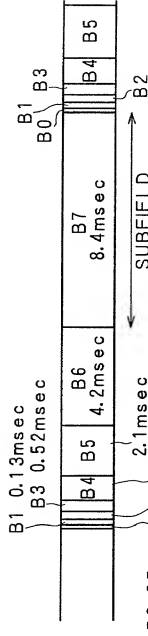


FIG. 16B

DIVISION

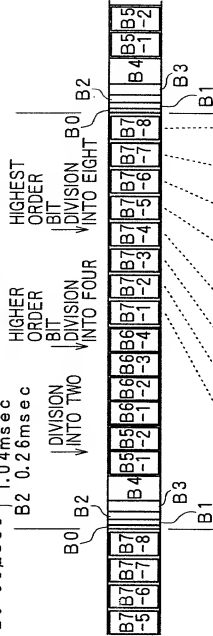


FIG. 16C

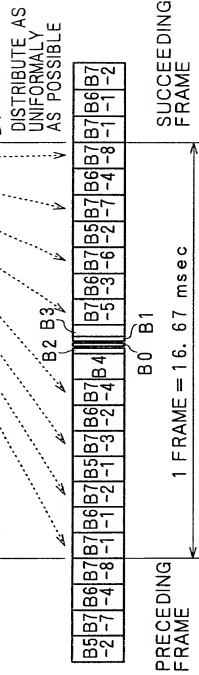
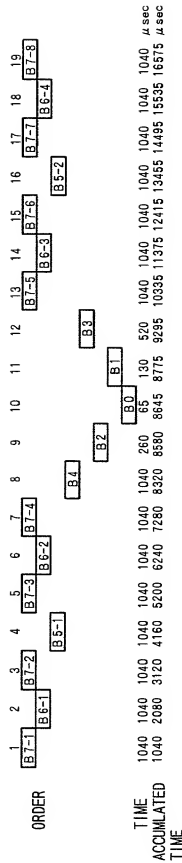
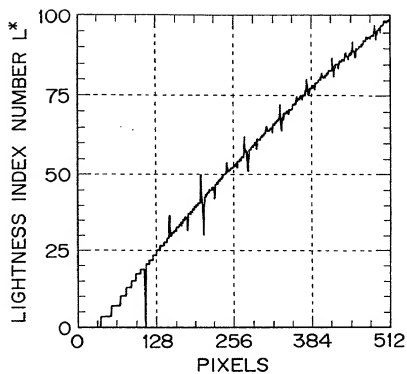


FIG. 17



F I G. 19A



F I G. 19B

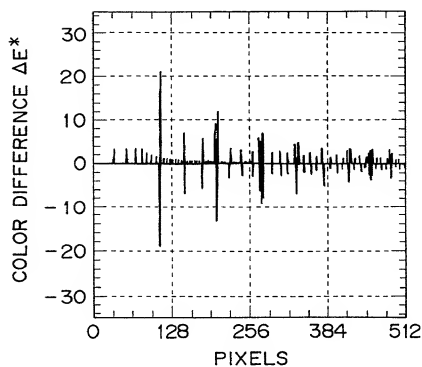


FIG. 20A

DIVISION		WEIGHT		μ sec	
NUMBER		AFTER		μ sec	
BIT PLANE		DIVISION			
MSB	87	128	8	16	8320
	63	64	4	16	4160
	32	32	2	16	1680
	16	16	1	16	840
	8	8	1	8	520
	4	4	1	4	260
	2	2	1	2	130
LSB	1	1	1	1	65
Blank				82	16667
TOTAL		19			

FIG. 20B

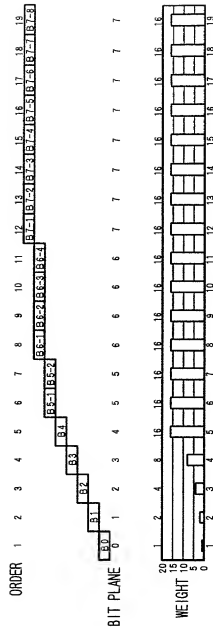


FIG. 21A

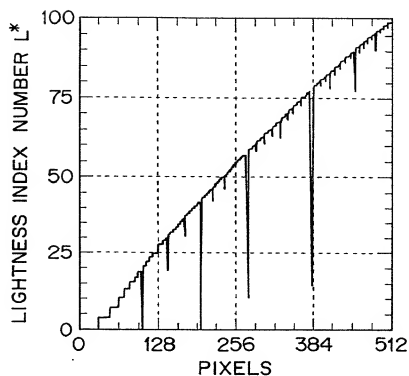


FIG. 21B

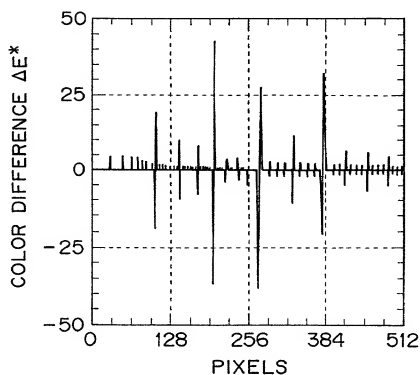


FIG. 22A

FIG. 22B

	DIVISION NUMBER		WEIGHT		AFTER DIVISION
	BIT PLANE	WEIGHT	WEIGHT		
MSB	B7	128	8	16	
	B6	64	4	16	
	B5	32	2	16	
	B4	16	1	16	
	B3	8	1	8	
LSB	B2	4	1	4	
	B1	2	1	2	
	B0	1	1	1	
Blank					
		TOTAL	19		

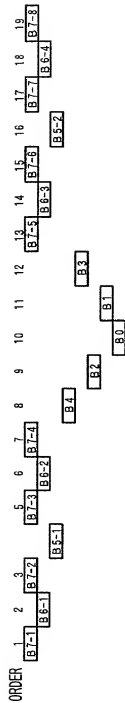


FIG. 23A

FIG. 23B

SUBFIELD NUMBER OF COLUMNS OF HORIZONTAL PIXELS	B7-1	B6-1	B7-2	B5-1	B7-3	B6-2	B7-4	B4	B2	B0	B1	B3	B7-5	B6-3	B7-6	B5-2	B7-7	B6-4	B7-8	NORMALIZED LIGHT AMOUNT		COLOR DIFFERENCE ΔE	
																				LIGHTNESS	×100		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0000	0.00	
(OMITTED)																							
270	0	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0	1	0	0	0	62.0	0.2431	24.31
271	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	63.0	0.2471	24.71	
272	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	63.0	0.2471	24.71	
273	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	64.0	0.2510	25.10	
274	0	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	64.0	0.2510	25.10	
(OMITTED)																							
502	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	244.0	0.9569	95.69	
503	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	246.0	0.9647	96.47	
504	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	246.0	0.9647	96.47	
505	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	248.0	0.9725	97.25	
506	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	248.0	0.9725	97.25	
507	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	251.0	0.9843	98.43	
508	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	251.0	0.9843	98.43	
509	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	253.0	0.9922	99.22	
510	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	253.0	0.9922	99.22	
511	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	255.0	1.0000	100.00	
512	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	255.0	1.0000	100.00	

FIG. 25A

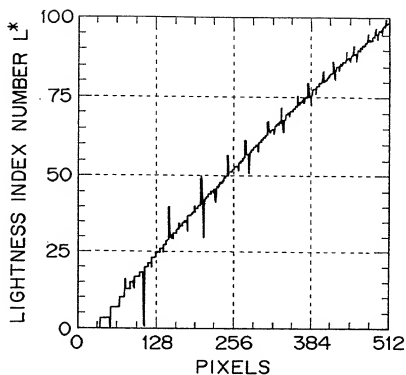


FIG. 25B

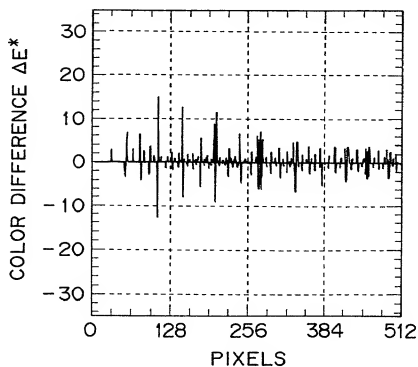


FIG. 26A

FIG. 26B

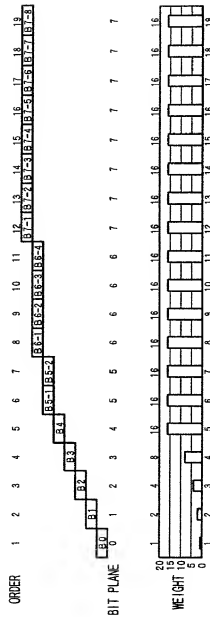
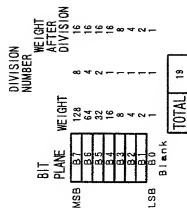


FIG. 27A

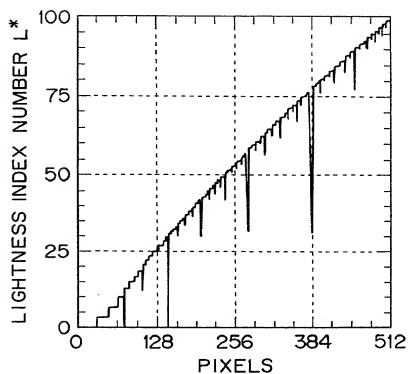


FIG. 27B

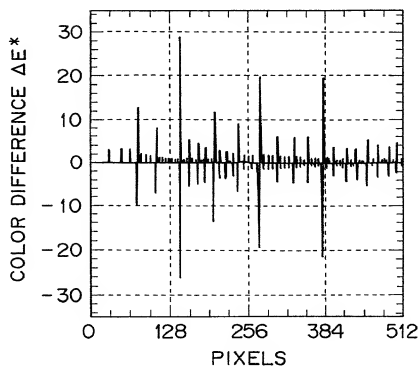


FIG. 28A

[illegible]

FIG. 28B

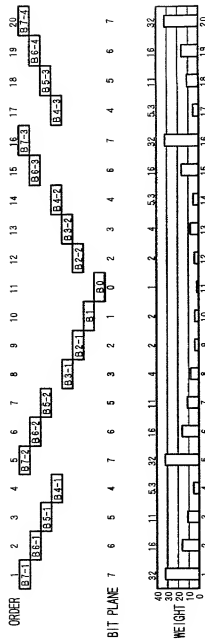


FIG. 29A

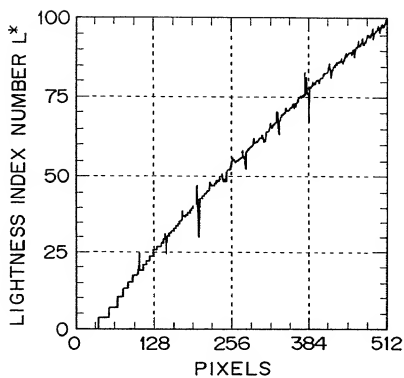


FIG. 29B

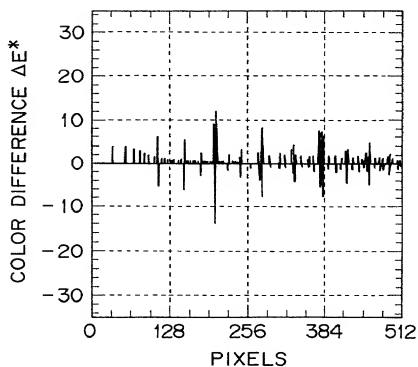


FIG. 31A

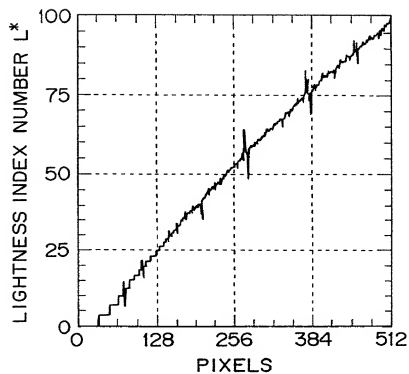


FIG. 31B

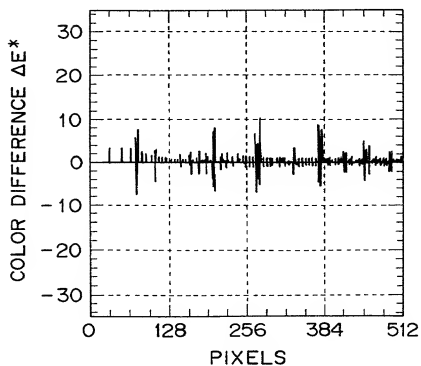


FIG. 33A

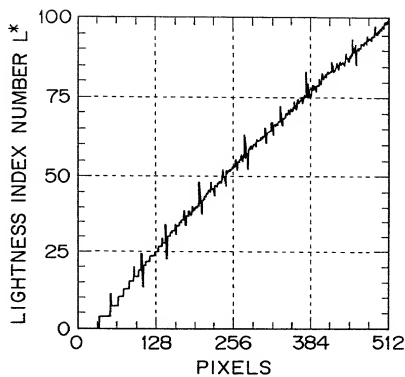


FIG. 33B

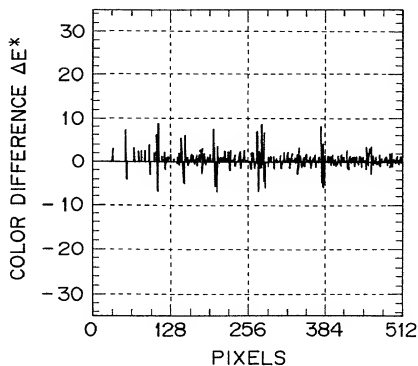


FIG. 34A

BIT		DIVISION	
PLANE	WEIGHT	NUMBER	WEIGHT
MSB	128	4	32
	64	3	21.33
	32	2	10.67
	16	3	5.33
	8	2	4
	4	2	2
	2	2	2
	1	1	1
LSB	Blank		
TOTAL		20	

FIG. 34B

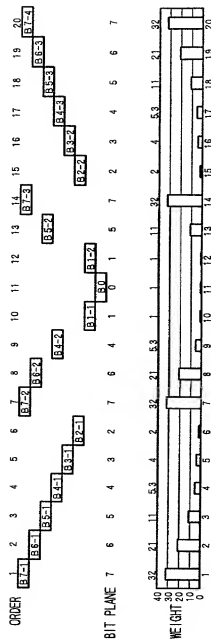


FIG. 35A

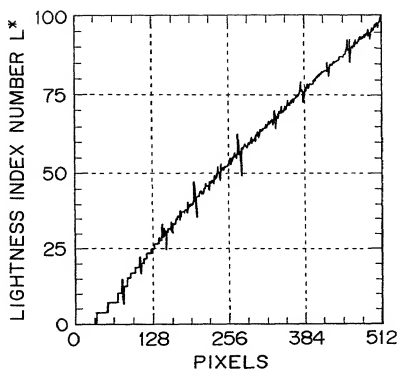


FIG. 35B

